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No. 85-1710

IN THE
Supreme Court of the United States
OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,
v.
SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

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MOTION OF SYNCOR INTERNATIONAL CORPORATION FOR LEAVE TO FILE A BRIEF AS *AMICUS CURIAE* AND BRIEF OF SYNCOR INTERNATIONAL CORPORATION AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

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TABLE OF AUTHORITIES

STATUTES: Page

Atomic Energy Act of 1954, Pub. L. No. 53-703, 68 Stat. 919, as amended, 42 U.S.C. § 2011 *et seq.* 3
42 U.S.C. § 2014(e) and (aa) 1
42 U.S.C. § 2021(b) 2
42 U.S.C. §§ 2771-2284 3

ADMINISTRATIVE REGULATIONS:

10 C.F.R. § 8.4(j) 2
10 C.F.R. § 20.1(c) 3
10 C.F.R. §§ 20.101-106 and Appendix B 3
10 C.F.R. Part 20 3
10 C.F.R. Part 35 3

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MOTION OF SYNCOR INTERNATIONAL CORPORATION FOR LEAVE TO FILE A BRIEF AS *AMICUS CURIAE*

Pursuant to Rule 36.1 of the Rules of the Supreme Court of the United States, Syncor International Corporation ("Syncor") respectfully moves for leave to file, as *amicus curiae*, the attached brief in support of the petition of Mallinckrodt, Inc. for a writ of certiorari. Mallinckrodt's attorneys have given their consent. The attorneys for the respondents have refused to consent.

Syncor operates 74 nuclear pharmacies in 31 states. Nuclear pharmacies prepare and dispense radiopharmaceuticals for human use. In this respect, the pharmacies are similar to conventional pharmacies that dispense prescription drugs. Nuclear pharamacies are unique, however, because the prescription products they dispense are radiopharmaceuticals—radioactive drugs used in the diagnosis and therapeutic treatment of diseases. Radiopharmaceuticals are compounded with "byproduct materials," [1] and are then transported to nuclear medicine

[1] Byproduct materials are radionuclides which are produced as a result of a sustained nuclear reaction. *See* 42 U.S.C. § 2014(e) and (aa).

departments at surrounding hospitals and clinics. Because of their highly perishable nature, radiopharmaceuticals must be available to nearby hospitals for immediate use. Independent nuclear pharmacies, including those operated by Syncor, supply a majority of all radiopharmaceutical drug products used in the United States.

Because their unique characteristics and imaging properties enable doctors to detect and treat early stages of abnormalities and diseases such as cancer, arthritis, tuberculosis and thyroid dysfunctions, radiopharmaceuticals have become an increasingly important component of the health care arsenal. These drugs also help physicians diagnose and treat people who suffer serious or life-threatening traumatic injuries (e.g., automobile crashes) and heart atacks. In fact, failure to use appropriate radiopharmaceuticals would constitute malpractice under the generally prevailing standard in most jurisdictions. Last year, radiopharmaceuticals were used to treat or diagnose over seven million patients.

Since radiopharmaceutical drug products are intended to be ingested or injected into the human body, they contain extremely low levels of radioactivity. Still, each pharmacy operated by Syncor is required to maintain a license from the Nuclear Regulatory Commission ("NRC") or an agreement state [2] and comply with the comprehensive array of federal safety regulations, including those covering the release and concentration of

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[2] An agreement state is any state with which the NRC has entered into an effective agreement under Subsection 274b of the Atomic Energy Act, as amended, 42 U.S.C. § 2021(b). The agreements give the states limited authority to license and inspect certain nuclear facilities, and require the states to "use their best efforts to assure that their regulatory programs for protection against radiation hazards will continue to be compatible with the AEC's [now NRC's] program for the regulation of byproduct, source and special nuclear material." 10 C.F.R. § 8.4(j). The AEC (Atomic Energy Commission) was the agency that preceded the NRC.

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radionuclides both inside and outside of a licensed facility. *See* 10 C.F.R. § 20.101-106 and Appendix B (1985). *See also* 10 C.F.R. Parts 20 and 35.

These regulations were issued by the NRC pursuant to the Atomic Energy Act (the "Act" or "Atomic Energy Act"), 42 U.S.C. § 2011 *et seq.*, which Congress passed in 1954 to encourage private industry in the development of nuclear technology for peaceful purposes. Under the Act, the NRC was delegated the sole responsibility for promulgating standards and regulations to ensure that nuclear facilities complied with the stringent criteria necessary to warrant safe operations in this technically complex field. The regulations devised under this broad delegation of authority cover every conceivable aspect of a licensee's operations, including the permissible levels for exposure and emissions, uses of radioactive materials and the disposal of radioactive wastes.[3]

As a licensed user of radionuclides, Syncor is vitally interested in the decision of the Missouri Court of Appeals.[4] The decision upsets Congress' carefully constructed federal regulatory scheme by permitting the states to impose, through *ad hoc* and possibly inconsistent jury verdicts, additional and more stringent safety standards on federally licensed facilities, regardless of whether such licensees limit radioactive emissions to levels lower than those approved in the comprehensive federal regulations. If the decision is allowed to stand, Syncor and other users, despite full compliance with the federal standard that emissions be "as low as is reasonably achievable," 10 C.F.R. § 20.1(c), may

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[3] In order to enforce compliance with this comprehensive regulatory scheme, Congress authorized the NRC to impose civil penalties, to revoke licenses and to seek injunctive relief for intentional or accidental violations of these regulations. In addition, Congress authorized criminal sanctions for willful violations of the Atomic Energy Act or the NRC's implementing regulations. 42 U.S.C. §§ 2771-2284.

[4] The decision is reported at 698 S.W. 2d 854 and reprinted in Appendix A to the Petition for Writ of Certiorari ("Pet. App.").

nevertheless be liable for compensatory and punitive damages for injuries allegedly caused by exposure to emission levels of radioactivity that are approved by the NRC.

Moreover, the pharmacies operated by Syncor and other similarly situated licensees such as hospital nuclear medicine departments are end users of byproduct materials rather than large-scale manufacturers. As such, they are not in a position to "pay the piper", as the Missouri Court of Appeals suggests (Pet. App. at 8a), in order to continue producing radiopharmaceuticals for medical use. Syncor's insurance costs will undoubtedly rise and if settlements or damage awards based on the Missouri court's decision become sufficiently large, Syncor in the future may not reasonably be able to afford the level of insurance protection needed. The lower court's decision therefore will not only have adverse effects on Syncor and similar users of nuclear materials but may also result in the curtailed use and availability of these valuable diagnostic and treatment tools.

For the reasons set forth above, Syncor respectfully requests permission to file the attached brief as *amicus curiae* in support of Mallinckrodt's petition for a writ of certiorari.

Respectfully submitted,

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QUESTION PRESENTED

Whether a radiopharmaceutical facility can, consistently with the federal preemption of the field of nuclear safety, be held liable for alleged injuries due to emissions of radiation at levels permitted by federal law.

TABLE OF CONTENTS

	Page
INTEREST OF SYNCOR INTERNATIONAL CORPORATION	1
SUMMARY OF ARGUMENT	4
REASONS FOR GRANTING THE WRIT	5
I. THE DECISION BELOW EFFECTIVELY EMPOWERS THE STATES TO ESTABLISH THEIR OWN RADIATION EMISSION STANDARDS DESPITE FEDERAL PREEMPTION OF THE FIELD OF NUCLEAR SAFETY	6
II. THE DECISION BELOW CREATES AN IRRECONCILABLE CONFLICT WITH FEDERAL NUCLEAR SAFETY STANDARDS AND FRUSTRATES THE GOALS AND OBJECTIVES OF THE ATOMIC ENERGY ACT	9
A. The decision of the court below would create an irreconcilable conflict with federal nuclear safety standards	9
B. The decision will frustrate the goals and objectives of the Atomic Energy Act	10
CONCLUSION	14

TABLE OF AUTHORITIES

CASES: Page

Cipollone v. Liggett Group, Inc., Nos. 85-5073, 85-5074 (3d Cir., decided April 7, 1986) 8
Duke Power Company v. Carolina Environmental Study Group, 438 U.S. 59, 57 L.Ed. 2d 595, 98 S. Ct. 2620 (1978) 10
McKay v. United States, 703 F.2d 464 (10th Cir. 1983) 8
Pacific Gas & Electric Co. v. State Energy Resources Commission, 461 U.S. 190, 75 L. Ed. 2d 752, 103 S. Ct. 1713 (1983) 6, 12
San Diego Building Trades Council v. Garmon, 359 U.S. 236, 3 L.Ed. 2d 775, 79 S. Ct. 773 (1959) 7
Silkwood v. Kerr-McGee Corp., 464 U.S. 238, 78 L.Ed. 2d 443, 104 S. Ct. 615 (1984) ..... *passim*
Silkwood v. Kerr-McGee Corp., 667 F.2d 908 (10th Cir. 1981) 8
Van Dissel v. Jersey Central Power & Light Company, 476 A.2d 310 (N.J. 1984) 8
Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 55 L.Ed. 2d 460, 98 S. Ct. 1197 (1978) 11

STATUTES:

Atomic Energy Act of 1954, Pub. L. No. 53-703, 68 Stat. 919, as amended, 42 U.S.C. § 2011 *et seq.* 13
Federal-State Act, Pub. L. No. 86-373, 73 Stat. 688, as amended, 42 U.S.C. § 2021 *et seq.* 6
Price Anderson Act, Pub. L. No. 85-256, 71 Stat. 576, as amended, 42 U.S.C. § 2210 *et seq.* 11, 12

ADMINISTRATIVE REGULATIONS:

10 C.F.R. § 20.1(c) 11
10 C.F.R. §§ 20.101-106 and Appendix B 1, 3
10 C.F.R. Part 20 3
10 C.F.R. Part 35 3

TABLE OF AUTHORITIES—Continued

LEGISLATIVE MATERIALS: Page

H.R. Rep. No. 1125, 86th Cong. 1st Sess. 3 (1959) .. 7
1959 U.S. Code Congressional and Administrative News, v. 2, p. 2879 6
S. 2046, 99th Cong., 2d Sess. (1986) 13
H.R. 4385, 99th Cong., 2d Sess. (1986) 13
H.R. 4460, 99th Cong., 2d Sess. (1986) 13

OTHER AUTHORITIES:

Saha, *Fundamentals of Nuclear Pharmacy* (2d Ed. 1983) 2
Reid, *The Liability Crisis,* The Washington Post, Feb. 23-25, 1986 13

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BRIEF OF SYNCOR INTERNATIONAL CORPORATION AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

INTEREST OF SYNCOR INTERNATIONAL CORPORATION

This case presents a substantial question of law concerning the doctrine of federal preemption of the emission standards for licensed users of nuclear materials. The decision by the Missouri Court of Appeals, if left undisturbed, would effectively permit the states to set emission standards lower than the federal emission standards promulgated by the Nuclear Regulatory Commission ("NRC"), 10 C.F.R. §§ 20.101-106, and thereby disrupt the comprehensive regulatory scheme established by Congress. Because the emission standards at issue apply equally to all licensed nuclear facilities, the decision will affect not only the petitioner but every user of nuclear materials from power plants to hospital nuclear medicine departments. Thus, Syncor International Corporation

("Syncor"), whose nuclear pharmacies compound diagnostic and treatment radiopharmaceuticals for medical use,[1] is directly and vitally affected by the decision below. Pet. App. at 1a, 698 S.W.2d 854 (Mo. Ct. App. 1985).[2]

Independent nuclear pharmacies, including those operated by Syncor, prepare and dispense daily dosage forms of radiopharmaceutical drugs, which are then transported to nuclear medicine departments at surrounding hospitals and clinics. The radiopharmaceuticals are compounded with "byproduct materials," which are materials that are made radioactive as a result of a sustained nuclear reaction. The radionuclides in these drugs decay naturally over a period of hours so that the drug products cannot be effectively stored for later use or transported over a long distance.[3] It is essential therefore that these highly perishable drugs be available for immediate use by physicians.[4] Accordingly, nuclear pharmacies must be located within a particular hospital or in close proximity to a group of hospitals.

Radiopharmaceuticals aid in the diagnosis and treatment of diseases of the central nervous system, thyroid, lungs, liver, spleen, pancreas, kidney, skeleton and heart.[5]

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[1] Syncor maintains 74 nuclear pharmacies in 31 states. Of these operations, some are licensed by the NRC and others are licensed by agreement states as medical distributors of radiopharmaceutical drug products. See footnote 2 in Motion of Syncor for explanation of agreement states.

[2] "Pet. App." denotes the appendix to the Petition for Writ of Certiorari.

[3] The time period in which a given radionuclide will decay is called the physical half-life. The physical half-life of the most commonly used diagnostic radiopharmaceutical is six hours.

[4] In specific terms, it should be noted that it would be impractical for hospitals in the State of Missouri to be serviced by a nuclear pharmacy in another state.

[5] A description of the basic nature and use of radiopharmaceutical drug products may be found in Saha, *Fundamentals of Nuclear Pharmacy* (2d Ed. 1983).

Moreover, these drugs when used as diagnostic radiopharmaceuticals assist doctors in saving the lives of people who sustain serious or even life-threatening traumatic injuries and heart attacks. The drugs therefore have become essential weapons against diseases and injuries and are widely used in the health care field.

Since radiopharmaceutical drug products are intended to be ingested or injected into the human body, they contain extremely low levels of radioactivity.[6] Still, each pharmacy operated by Syncor is required to maintain a license from the NRC or an agreement state and comply with the vast array of federal safety regulations, including those covering the release and concentration of radionuclides both within and outside of a licensed facility. *See* 10 C.F.R. § 20.101-106 and Appendix B. *See also* 10 CF.R. Part 20 and Part 35.

The NRC's comprehensive federal safety standards serve to protect the general public against the health risks associated with the use of nuclear materials.[7] They also establish a benchmark against which licensees may measure their operations. Nuclear pharmacies, hospital nuclear medicine departments and other users of nuclear energy have a vital interest in the continued applicability of uniform federal safety regulations. However, the decision of the Missouri Court of Appeals, by authorizing the imposition of tort liability on a licensee complying with federal regulations, threatens to destroy the uniformity and certainty established by the federal regulations. If nuclear safety standards are set by random and potentially inconsistent jury decisions, a licensed nuclear facility will be unable to predict the level at which potentially

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[6] The dose of radioactivity contained in a typical diagnostic radiopharmaceutical is roughly equivalent to the amount of radioactivity contained in one chest x-ray.

[7] The NRC's maximum permissible dose regulations are largely adopted from the recommendations of the National Council on Radiation Protection and Measurement and are set far below a level where adverse health effects are known to occur.

crippling compensatory and punitive damages may be imposed. Since Syncor operates pharmacies in thirty-one states, the uncertainty is compounded by the prospect that such judicially imposed safety standards will vary from state to state.

While the decision by the Missouri Court of Appeals adversely affects all licensees, it may have a particularly significant impact on nuclear pharmacies such as those operated by Syncor. The introduction of tort liability for planned, low level emissions of radiation will cause increases in insurance rates and the insurance limits necessary for adequate protection. If these increases become sufficiently large, Syncor may be required to obtain more insurance than it can feasibly afford or acquire. If the decision below is permitted to stand, the possibly prohibitive costs of obtaining insurance may force independent nuclear pharmacies and hospital nuclear medicine departments to close their operations. Therefore, the decision below may threaten the very existence of Syncor and other end users of radiopharmaceuticals, with the corresponding curtailment of the manufacture and use of these products for the diagnosis and treatment of patients with serious, life-threatening diseases and injuries.

SUMMARY OF ARGUMENT

The decision of the Missouri Court of Appeals incorrectly applies the doctrine of federal preemption and permits the state by jury verdict to create its own radiation emission standards that may likely be more stringent than federally established standards, even though Congress intended that federal regulations completely occupy the field of nuclear safety.

The Missouri Court of Appeals incorrectly extended this Court's decision in *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238 (1984) to impose tort liability on facilities that are in full compliance with federal regulations. The *Silkwood* decision did not sanction state tort actions that

will impose more stringent emission standards than those established by the NRC.

The effect of the decision will be to allow juries who are unfamiliar with nuclear technology to set radiation emission standards on an *ad hoc* basis. These standards will conflict with standards set by the NRC, the federal agency with the expertise to establish standards in this technically complex field. Because standards created by juries on an *ad hoc* basis cannot be predetermined by licensed users of nuclear products, the industry will be faced with the prospect of having to pay potentially crippling damage awards or insurance premiums as a cost of doing business.

The Missouri Court of Appeals improperly overrides the important congressional policy of encouraging and promoting the nuclear industry's development. By permitting the imposition of potentially enormous tort liability, the decision of the court below will inhibit and perhaps preclude nuclear pharmacies from continued operations. The decision therefore effectively gives the state the power to prohibit the use of nuclear energy, even for critical medical and life-saving purposes, when Congress has decided that the benefits of nuclear technology are worth the risks.

REASONS FOR GRANTING THE WRIT

The Missouri Court of Appeals held that a federally licensed user of nuclear materials may be found liable for injuries allegedly caused by radiation emissions even where the levels of emissions are below the federal regulatory standards promulgated by the NRC. The court reached this result even though it acknowledged that imposing tort damages would effectively allow the state to set emission standards that might be lower than the federal standard. Pet. App. at 7a-8a. The decision therefore is inconsistent with the decisions of this Court precluding the states from setting their own safety standards

in light of federal preemption of this area. Review of the Missouri court's decision is necessary to protect the integrity of the federal regulatory scheme enacted by Congress in the field of nuclear safety.

I. THE DECISION BELOW EFFECTIVELY EMPOWERS THE STATES TO ESTABLISH THEIR OWN RADIATION EMISSION STANDARDS DESPITE FEDERAL PREEMPTION OF THE FIELD OF NUCLEAR SAFETY.

Except for very limited powers expressly ceded to the states, "the federal government has occupied the entire field of nuclear safety concerns. . . ." *Pacific Gas & Electric Co. v. State Energy Resources Compensation and Development Commission*, 461 U.S. 190, 212 (1983). Thus, Congress "prohibit[ed] the States from regulating the safety aspects of nuclear development. . . ." *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 250 (1984).

The federal preemption of nuclear safety includes the authority to set emission radiation standards. As the Joint Committee on Atomic Energy stated in connection with the Federal-State amendment to the Atomic Energy Act, Pub. L. 86-373, 73 Stat. 688, as amended, 42 U.S.C. § 2021:

> It is not intended to leave any room for the exercise of dual or concurrent jurisdiction by States to control radiation hazards by regulating byproduct, source, or special nuclear materials.[8]

1959 U.S. Code Congressional and Administrative News, v.2, p. 2879.

The authority to develop comprehensive nuclear safety standards was delegated solely to the NRC (and pre-

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[8] The only authority the states have to regulate and license nuclear materials is delegated to them by the NRC through state agreements. See footnote 2 in Motion of Syncor.

viously to the Atomic Energy Commission) because it has superior technical expertise and is more qualified than any state agency in matters of nuclear safety. H.R. Rep. No. 1125, 86th Cong. 1st Sess., 3 (1959). Moreover, the NRC has the resources necessary to keep pace with the constantly changing technology of nuclear materials. The agency can charge advisory committees with investigating new technologies and employ experts to evaluate new and proposed safety measures. In addition, uniform nuclear safety standards can be more strictly enforced by a centralized federal agency than by state agencies, which may create standards varying from state to state. Since Congress intended for the nuclear industry to be as closely regulated as possible, safety standards set exclusively by the NRC would achieve that goal.

The decision of the Missouri Court of Appeals, by subjecting licensees to tort liability even if they comply with federal regulations, effectively permits states to set their own standards in the field of nuclear safety in a haphazard manner by courts and juries without technical expertise. It thus allows the states impermissibly to intrude in an area that Congress reserved to the federal government. Although the court reasoned that the imposition of common law tort liability does not impose requirements on licensees, because the licensees may choose between risking liability by not changing their behavior or attempting to negate the risk by lowering their emission rates, the court recognized that this reasoning "may appear to be disingenous and smack of sophistry. . . ." Pet. App. at 8a. Quite so. This Court has recognized that damage awards can serve to exercise regulatory control. *See San Diego Building Trades Council v. Garmon*, 359 U.S. 236, 247 (1959). The states should not be permitted to accomplish indirectly through the imposition of tort liability that which Congress prohibited them from doing directly.

The courts, to be sure, have held that there is a narrow exception to this broad federal preemption of the field of

nuclear safety and have allowed recovery of damages under state law.[9] This Court, too, has recognized this exception in *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238 (1984). Contrary to the Missouri court's reading of *Silkwood*, however, this Court did not sanction the imposition of tort liability even where the user of nuclear materials complied with federal standards. In *Silkwood*, the evidence introduced at trial showed that there had been an "unlawful" release of radioactivity and that the operator of the plant likely had violated federal safety standards. 464 U.S. at 243-44.

It is one thing to allow the imposition of common law tort liability where federal emission standards have been violated. Damages awarded against violators of the standards do not interfere with the federal standards but serve to complement and facilitate compliance with such standards. It is quite another thing to allow the imposition of state tort liability where the user of nuclear materials has complied with the federal standards. In the latter case, the states, not the NRC, become the arbiter of what are permissible emission standards. This would negate Congress' intent in preempting the field of nuclear safety. Thus, this Court should review the decision below to correct what in effect will become the states' preemption of federal authority in setting nuclear standards.[10]

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[9] *See, e.g., McKay v. United States*, 703 F.2d 464, 468-69 (10th Cir. 1983); *Silkwood v. Kerr-McGee Corp.*, 667 F.2d 908 (10th Cir. 1981), *rev'd on other grounds*, 464 U.S. 238 (1984).

[10] Review by this Court is particularly necessary because at least one other state court relying on *Silkwood* has held that state tort actions are not preempted despite compliance with federal regulations. *Van Dissel v. Jersey Central Power & Light Company*, 476 A. 2d 310, 316 (N.J. 1984) (property damage action for damages allegedly caused by thermal pollution arising out of nuclear power plant cooling system not preempted even where no proof that facility operated in a manner not authorized, approved or licensed). In contrast, the Third Circuit in *Cipollone v. Liggett Group, Inc.*, Nos. 85-5073, 85-5074 (3d Cir., decided April 7, 1986), reached a

II. THE DECISION BELOW CREATES AN IRRECONCILABLE CONFLICT WITH FEDERAL NUCLEAR SAFETY STANDARDS AND FRUSTRATES THE GOALS AND OBJECTIVES OF THE ATOMIC ENERGY ACT.

In *Silkwood*, this Court also held that even if common law tort actions are not generally preempted, federal law might nonetheless preempt recovery under state law if "there is an irreconcilable conflict between the federal and state standards or [if] the imposition of a state standard in a damages action would frustrate the objectives of the federal law." 464 U.S. at 256. The tort action permitted by the Missouri Court of Appeals decision is preempted under both prongs of this test because the imposition of tort liability on a licensee complying with federal standards would wreak havoc on the comprehensive regulatory scheme established by the NRC and achieve a regulatory result Congress did not intend.

A. The decision of the court below would create an irreconcilable conflict with federal nuclear safety standards.

Unlike the *Silkwood* case, where imposing liability on violators of federal regulations may complement the regulatory scheme and facilitate compliance with federal law, the decision below will penalize facilities that emit radiation in accordance with federal law and will directly conflict with the regulatory system set in place by Congress.

As discussed in Part I above, Congress granted exclusive authority to the NRC to develop nuclear safety standards because it is more technically qualified than any state agency in matters of nuclear safety. The Missouri court's decision would have the perverse result of

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different conclusion with respect to the Federal Cigarette Labeling and Advertising Act and held that the Act preempted state law damage actions that challenge either the adequacy of the warning on cigarette packages or the propriety of a party's actions with respect to the advertising and promotion of cigarettes.

effectively giving the authority to set safety standards not to the NRC or even to a state agency, but rather to state jurors who likely will be completely unfamiliar with nuclear technology.[11] A jury, by awarding damages against a licensee who meets federal standards, will effectively be establishing more stringent standards that may vary from case to case or state to state. These state standards will directly and unavoidably conflict with the uniform federal standards set by the NRC. The Missouri Court of Appeals assumes that industry would rather pay than comply with safety standards;[12] yet, the converse is true. The nuclear industry, including Syncor, would rather comply with requisite safety standards than pay jury awards. The Court should review the decision below to prevent the conflict with the federal standards that will be created as a result of the decision below.

B. The decision will frustrate the goals and objectives of the Atomic Energy Act.

In enacting the Atomic Energy Act, Congress chose to encourage private industry to develop peaceful uses for nuclear energy. However, in 1957, it became clear that simply lifting the federal government's monopoly on the development of atomic energy was not enough to induce companies to use nuclear technology. Private industry was reluctant to enter the field because of the potential for enormous liability. *Duke Power Company v. Carolina Environmental Study Group*, 438 U.S. 59, 63-64 (1978). Accordingly, Congress responded by amending the Atomic

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[11] Justice Powell, in his dissenting opinion in the *Silkwood* case, recognized that lay juries have no competency to understand the highly sophisticated technology of nuclear facilities. 464 U.S. at 278.

[12] Specifically, the court below stated, "Mallinckrodt can continue to meet federal standards, and, if found wanting by state standards, simply pay the piper." Pet. App. at 8a.

Energy Act to include the Price-Anderson Act. 42 U.S.C. § 2210 *et seq.* This amendment limited the liability that could be imposed on private companies to $560 million dollars, provided government indemnification and empowered the NRC to require licensees to obtain insurance from private sources. In so doing, Congress again reaffirmed its determination that private industry should be encouraged to participate in the development of nuclear energy and that this justified the federal government's assuming some responsibility for damages arising from a catastrophic nuclear incident.

The federal radiation emission standard, "as low as is reasonably achievable," 10 C.F.R. § 20.1(c), reflects this same public policy decision. The regulation exists both to protect the public and also to permit the growth of the nuclear industry. Moreover, the federal regulations were adopted pursuant to the NRC's informal rulemaking process. *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 55 L.Ed. 2d 460, 98 S. Ct. 1197 (1978). The public, including the respondents in this case, had the opportunity to participate in the NRC's rulemaking process and comment on the proposed radiation emission standards. Once issued in final form, these standards have the force of law.[13]

By permitting the imposition of either compensatory or punitive tort liability for low level radiation emissions regardless of compliance with federal standards,[14] the decision by the Missouri Court of Appeals contravenes

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[13] Therefore, contrary to the opinion expressed by the Missouri Court of Appeals, these federal regulations are not merely guidelines for state law, Pet. App. at 11a, nor "standards adequate for administrative purposes in meeting governmental goals. . . ." Pet. App. at 10a.

[14] The Respondents seek compensatory and punitive damages in the amount of one billion dollars and injunctive relief.

the public policy decision made by Congress.[15] The practical result of the decision will be to force users of nuclear materials to pay substantial damage awards out of their own pockets or obtain sufficient insurance if they are to continue in business. Users such as nuclear pharmacies and hospital nuclear medicine departments, however, may not be able to afford or obtain sufficient insurance for all the potential liability claims involved.[16] At present, the insurance limits of nuclear pharmacies and hospital nuclear medicine departments are low because the potential for accidental contamination is smaller than for large nuclear facilities.[17] However, the insurance premiums for nuclear pharmacies and other similar users will undoubtedly rise to reflect the new potential liability imposed by the Missouri court. This increase will cause a price increase in radiopharmaceutical products with an adverse effect on patients. If the increase in premiums is large enough or if insurance becomes unavailable, these

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[15] The Missouri Court of Appeals furthermore incorrectly suggests that states are free under the Atomic Energy Act to use or reject the use of nuclear energy. Pet. App. at 9a to 10a. In *Pacific Gas & Electric Co. v. State Energy Resources Commission*, 461 U.S. 190 (1983), this Court held that a state determination that nuclear power is not safe enough to be developed would impermissibly interfere with Congress' countervailing judgment.

[16] Under the Price Anderson Act, the NRC may require users of byproduct materials to obtain liability insurance covering injuries arising from nuclear incidents. 42 U.S.C. § 2210 *et seq.* To date, the NRC has not imposed such requirements on nuclear pharmacies and hospital nuclear medicine departments.

[17] Nuclear pharmacies and hospital nuclear medicine departments primarily use byproduct material having a half-life of no more than six hours. On the other hand, nuclear power plants use source material that may have a half life of up to 2000 years. Moreover, the prescription products dispensed by a nuclear pharmacy, which are intended to be injected or ingested are generally comparable to one chest x-ray. Thus, for example, the contamination that could occur in connection with an accidental contamination at a nuclear power plant or any other facility utilizing a nuclear reactor is vastly different from a similar accident at a nuclear pharmacy.

facilities may be forced to consider whether to curtail or halt the production of these drugs.[18]

Life-saving radiopharmaceutical drugs represent precisely the kind of peaceful use of nuclear energy that Congress intended to promote through the Atomic Energy Act.[19] The Missouri court's decision frustrates Congress' considered choice to encourage the safe use of nuclear energy and the comprehensive regulatory system designed to achieve Congress' objective. This Court should review the decision below to prevent this frustration of Congress' scheme.

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[18] The liability crisis that is foreshadowed here has affected other industries as recent newspaper articles have reported. Reid, *The Liability Crisis*, The Washington Post, Feb. 23-25, 1986. Indeed, several bills have been recently introduced in Congress that propose various solutions to limit liability in civil cases so insurance will be affordable and available. S. 2046, 99th Cong., 2d Sess. (1986); H.R. 4385, 99th Cong., 2d Sess. (1986); H.R. 4460, 99th Cong., 2d Sess. (1986).

[19] In the statute itself, Congress stated that:

> Atomic energy is capable of application for peaceful as well as military purposes. It is therefore declared to be the policy of the United States that . . . the development, use, and control of atomic energy shall be directed so as to make the maximum contribution to the general welfare . . . .

42 U.S.C. § 2011.

CONCLUSION

For the foregoing reasons, Syncor International Corporation respectfully urges this Court to grant the petition for certiorari of Mallinckrodt, Inc.

Respectfully submitted,

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